



U.S. DEPARTMENT OF
ENERGY

Paducah Gaseous Diffusion Plant Deactivation Task Order End State Expectations

May 1, 2013



***E**_M Environmental Management*

safety ♦ performance ♦ cleanup ♦ closure

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Facility Deactivation and Optimization (End of Period 3 - C.1.3)

At the end of Period 3, the Gaseous Diffusion Plant will be shutdown and placed in a configuration for long-term, cost effective management prepared for the next phase of deactivation, decommissioning, and demolition.

- ✓ Safety systems will be established at the lowest practical level based on safety basis requirements.
- ✓ The Contractor will have completed all cylinder transfers from the 48Gs to the 48Y cylinders.
- ✓ Uranium and Technetium-99 deposit/hold-up will be located and quantified to the necessary extent for safe management of the facilities.
- ✓ Systems that include materials that can be deactivated to the extent practical will be ready for decommissioning and demolition (such as freon, waste oil, etc.).
- ✓ Sanitary water system will be privatized or operated in a cost effective manner based on implemented optimizations, right-sized for the DOE mission activities at the site.



Facility Deactivation and Optimization (End of Period 3 - C.1.3) (Cont.)

- ✓ Site sewer system will be optimized and operated in a cost effective manner, right-sized for the DOE mission activities at the site.
- ✓ DOE will be using a consolidated switchyard only responsible for power supply into its own facilities (low-side of any switchyard).
- ✓ Utility companies such as Tennessee Valley Authority, Electric Energy Inc. or other entities will be responsible for the switchyards where the external power lines enter (high-side) and DOE will not have any direct responsibility as a power supplier.
- ✓ Heat and air systems for facilities that continue to require temperature control will be optimized and operated in a cost effective manner, right-sized for the DOE mission activities at the site.
- ✓ Analytical Laboratory services will be provided to DOE site tenants/contractors in a cost-effective manner meeting the stated specifications of each tenant/contractors requiring services.



S&M and Utility Operations

(End of Period 3 - C.1.3)

At the end of Period 3, S&M will be at stable, minimum levels; however, will meet DOE Order and all other regulatory requirements. Utility operations will be stabilized and meeting the needs of site contractors/tenants.

- ✓ Facilities not required for continue missions at PGDP are shut-down to the maximum extent possible.
- ✓ Facility inspections including equipment and/or structure are minimized.
- ✓ Occupation of facilities are reduced to the maximum extent possible.
- ✓ PCB cleanup activities under the Toxic Substances Control Act Federal Facilities Compliance Agreement are ongoing.
- ✓ DOE Material Storage Areas have been eliminated.
- ✓ S&M costs are reduced by approximately 2/3 from original costs at release.



S&M and Utility Operations (Cont.)

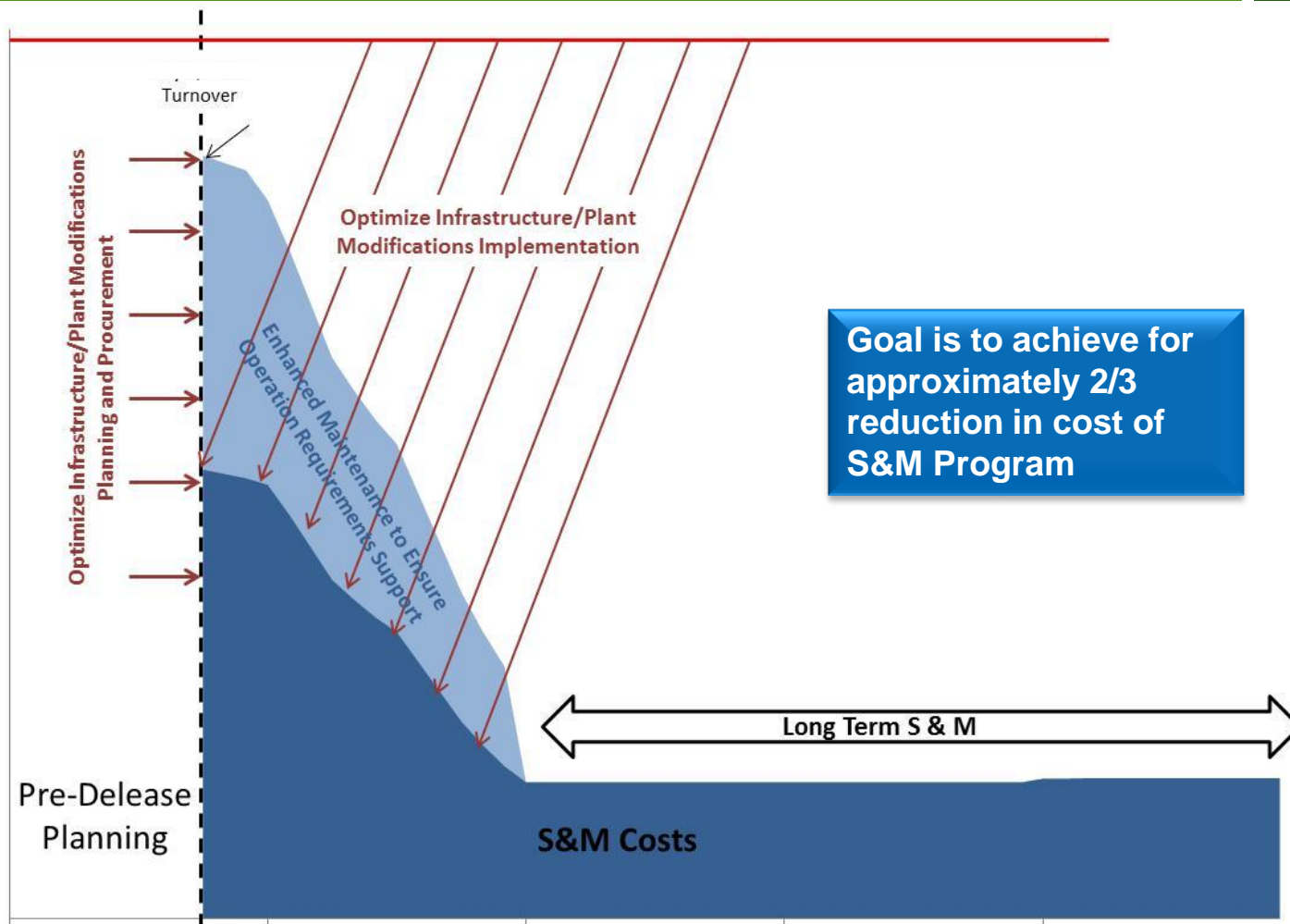
(End of Period 3 - C.1.3)

- ✓ Preventive, predictive, and corrective maintenance actions only necessary to support near-term Contractor or site tenants/contractors operations is being conducted (although are periodically assessed for additional efficiencies).
- ✓ Critical equipment is operable, such as the criticality accident alarm systems and public warning systems, monitor radiological conditions, and check and maintain safety-related items; the Contractor has reduced or eliminated unnecessary critical equipment or systems that were no longer required for compliance with DOE requirements.
- ✓ The use of recycling excess materials and equipment to reduce project costs in accordance with DOE O 436.1 are maximized, including leading efforts to gain approval for recycling scrap metals.



S&M and Utility Operations (Cont.)

(End of Period 3 - C.1.3)



Post-GDP Shutdown Environmental Services (End of Period 4 - C.1.6 and C.1.7)

The Post-GDP Shutdown Environmental Services will be transitioned and integrated into the Post-GDP Shutdown baseline and re-sequenced to compliment GDP S&M and D&D strategies.

- ✓ There will only be one baseline for the D&D of the GDP that includes the S&M, D&D, and environmental cleanup activities.
- ✓ Environmental Reporting and Monitoring, including management of site databases will be consolidated and integrated with S&M and D&D activities.
- ✓ Operable Units will be established for the Post-GDP Shutdown Cleanup Approach.
- ✓ Waste Management Operations will be conducted in a cost effective manner that integrates managing remediation and D&D waste, and utilizes site landfills efficiently and in a manner that reduces overall costs to the programs.
- ✓ Groundwater Source Treatments for C-400 and Southwest Plume will be completed.



Project Support/Management (End of Task Order – C.1.2)

Project support staff levels are right-sized and cost-effective for managing the Deactivation work scope in accordance with end state expectations.

- ✓ Environmental, Safety, Health, and Quality Programs, including the Integrated Safety Management System, the Environmental Measurements Systems, and Radiation Protection Program are established and functioning maturely.
- ✓ Project baselines are established and aligned with deactivation, decommissioning, and demolition plans for the PGDP.
- ✓ Activities are being conducted in accordance with applicable state and federal regulatory requirements, as well as, environmental permits.
- ✓ Federal Facility Agreement milestones are on schedule for completion in accordance with approved Site Management Plans.
- ✓ Work force levels are stabilized.



Project Support/Management (Cont.) (End of Task Order – C.1.2)

- ✓ Procedures, performance documents, and work control documents are established for all task order activities.
- ✓ Security Programs, including NMC&A are established in compliance with DOE requirements.
- ✓ Records and vital information are being maintained in a retrievable cost-effective manner.
- ✓ Property is accounted for and is being managed in compliance with DOE requirements.

